

### STATUS OF THE CLAIMS

Claims 1-7 are pending in the application.

Claims 1, 3-4 and 6 were rejected under 35 USC§102 as being anticipated by Angele '187.

Claims 2, 5 and 7 were rejected under 35USC§103(a) as being unpatentable over Angele '187.

Claims 1-3 are canceled by this Amendment A.

Claims 4, 5, 6 (Amended) and 7 (Amended) remain pending in the application following entry of this Amendment A.

### REMARKS

#### Summary of the Invention

The present invention provides an induction coil comprising a plurality of concentric tubular members, each of said tubular members further comprising a plurality of elongate, parallel, electrically conductive strips, each of said strips having a strip length, a strip width and a strip thickness, each of said parallel electrically conductive strips being separated from adjacent parallel strips by a gap having a gap width, wherein said gap width is less than said strip width and said strip thickness, and wherein at least one electrically conductive strip on one said tubular member is in electrical communication with an electrically conductive strip on a different tubular member.

### The Rejection Under 35USC§102

Claims 1, 3-4 and 6 were rejected under 35USC§102 as being anticipated by Angele '187. Briefly, Angele discloses an armature for a motor wherein in a first embodiment, parallel conductive strips are printed, plated or otherwise deposited on both the inner and outer surfaces of a single tubular support and appropriately interconnected at the ends thereof to form an induction coil. In a second embodiment, conductive strips are formed on only the outer surface of the tubular support. The strips are then coated with an insulating material and a second set of parallel strips are formed on the outer surface of the insulating material. The ends of the conductive strips are then interconnected as with the first embodiment to form an induction coil.

In contrast, the present invention discloses and claims an induction coil that is similar in both structure and function to the armature of Angele, but differs in important aspects; the differences providing improved performance over the Angele device in the intended applications. First, in the present invention, the (two or more) concentric tubular members employed in the present induction coil are separately constructed by forming (e.g., by die cutting, etching or stamping) the conductive strips on a sheet of electrically conductive material, then rolling the sheet bearing the strips into a tubular member. The concentric tubular members employed in the present induction coil are not formed on a tubular support, as with the Angele coil, which enables the conductive strips to be stamped or die-cut into a sheet of conductive metal. This difference enables the gap between the strips in the present coil to be less than the thickness of the conductive strips. This is not possible with the teaching of Angele for the following reason. In the etching process, the gap between adjacent conductive strips is, by necessity, "V"-shaped due to uneven

dissolution of the metal during the etching process. While Angele's drawings show the cross-section of the conductive strips to be "substantially rectangular" (Figure 2), this cannot be the case with etched strips made in accordance with his invention. In fact, the Angele disclosure is nonenabling for conductive strips having a rectangular cross-section. Further, the disclosure is nonenabling for a gap width that is less than the strip thickness inasmuch as the outermost portion of the gap must be at least as wide as the strip thickness.

In order for a patent to qualify as a reference supporting a §102 (b) rejection, it must disclose each and every limitation of the rejected claim. It is settled that even only slight differences between the compared inventions prevent a rejection based on lack of novelty under §102. Anticipation under 35 USC§102 requires that the cited references demonstrate each and every element of the claimed invention. In view of the differences between the recited gap width of the present invention and those possible when viewed in the light of the prior art presented herein, it is requested that this rejection be withdrawn.

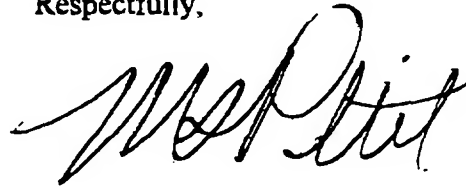
#### The Rejection Under 35USC§103

Claims 2, 5 and 7 were rejected under 35USC§103(b) as being anticipated by Angele. The Examiner argues that Angele teaches an induction coil that is the same as the present invention and wherein the cross-section of the conductive strips is rectangular. As noted above, notwithstanding the drawing in Angele, the disclosure is nonenabling for providing an induction coil comprised of parallel conductive strips having the rectangular cross-section depicted in the drawing (i.e., the drawing set forth in Figure 2 is in error). In practice, the cross-sectional view of a conductive strip made in accordance with the teaching of Angele would be trapezoidal wherein two opposing sides are parallel to one

another and the remaining two sides are slanted with respect to one another. The Angele reference lacks enablement for conductive strips having a substantially rectangular cross-section and such an interpretation of the teaching is submitted to be improper when taken in the context of the teaching set forth in the complete disclosure. Hence, as shown above, the gap width in Angele must be greater than or equal to the thickness of the conductive strips. In contrast, the present invention provides an induction coil wherein the gap width, as recited in independent claim 4, is less than the thickness of the conductive strips. In view of these clarifications regarding the difference between the elements of the present invention and the prior art it is requested that this rejection be withdrawn.

Entry of this amendment, reconsideration, favorable action and early allowance and publication of this application are respectfully requested. If there are any minor matters remaining, it is respectfully requested that the examiner contact the undersigned by phone so that possible minor changes may be discussed in order to expedite the prosecution of this case.

Respectfully,



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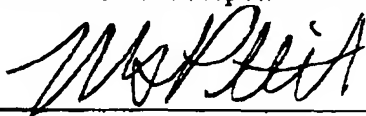
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## CERTIFICATE OF FACSIMILE TRANSMISSION

I hereby certify that the following papers are being facsimile transmitted to the Patent and Trademark office on the date shown below.

1. Urgent and Time Sensitive Communication to the Examiner
2. Amendment A responsive to the Office Action dated 4/25/03.



Michael G. Petit

Date: July 21, 2003

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